

December 2005 Update

Rocky Mountain Arsenal Superfund Site Adams County, Colorado (5-Year Review Date: 01/31/01)

Highlights Since the 2001 5-Year Review

- Ongoing monitoring of Basin F Wastepile leachate levels
 - 2004 water year Exceedence Map provided to State Engineering Office
 - Private Well Network Project reduces off-Post monitoring in 2002
 - ROD design for the Basin F Wastepile finished.
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Brief Site History: The Army established Rocky Mountain Arsenal (RMA) in 1942 to produce warfare agents and incendiary munitions used in World War II. Following the war and through the early 1980's, the Army continued to use these facilities. Beginning in 1946, some RMA facilities were leased to private companies to manufacture industrial and agricultural chemicals. Shell, the principal lessee, manufactured primarily pesticides at RMA from 1952 to 1982. Common industrial and waste disposal practices during these years resulted in significant levels of contamination. Approximately 70 chemicals have been the focus of remedial investigations for the On-Post Operable Unit (OU). The remedial investigation and subsequent investigations have identified chemicals at over 180 sites contaminating soil, ditches, stream and lakebed sediments, sewers, groundwater, surface water, biota and structures. Unexploded ordnance has been identified at several locations on-site.

Surrounded by development, the On-Post OU provides a refuge for an abundant diversity of flora and fauna. For this reason, the site has been designated as a future National Wildlife Refuge in accordance with the RMA National Wildlife Refuge Act of 1992.

Cleanup Activities Completed: Sites that posed potential immediate risks to human health and the environment were addressed through interim response actions. One groundwater pump and treat system has been implemented for the Off-Post OU and five On-Post OU water treatment facilities (one has successfully treated the associated groundwater plumes and been shut down) which process over one billion gallons of water each year.

Current Status: Currently, various components of the remedy are being implemented.

Summary of Protectiveness: All controls are in place to adequately minimize risks. Because the remedial actions at both the On-Post and Off-Post Operable Units are expected to be protective of human health and environment, upon completion the remedy for the entire site is expected to be protective of both human health and the environment.

Issues Impacting Protectiveness: Two issues and five recommendations were noted during the five-year review. The following table summarizes the status of the follow-up actions addressing these issues and recommendations.

**Rocky Mountain Arsenal Superfund Site
Five-Year Review 2005 Update Table
(Review Date: 10/25/00)**

Issues	Recommendations/ Follow-Up Actions	Follow-Up Actions (Status/Due Date)	Status of Follow-Up Actions 12/05	Responsible Party
1) Basin F Wastepile: Wastepile is not operating as designed in the Interim Response Action.	No new action is recommended to address the deficiency, the collection system and leachate levels should continue to be carefully monitored on a daily basis until the waste pile is addressed as directed in the On-Post ROD.	N/A: monitoring is ongoing and the ROD design was finished in 2005.	Daily Monitoring of the collection system and leachate levels is ongoing as required. Excavation is slated to begin in 2006 and require 18 months to complete. Began wastepile support facility construction 2005.	Rocky Mountain Arsenal (RMA)
2) Off-Post Institutional Controls: The requirement to include a distinctive notice on each well permit application correspondence, well permit and drilling permit was not followed for 10 of 26 well applications received.	<ul style="list-style-type: none"> - RMA will set up quarterly meetings with the Colorado State Engineer's Office (SEO) staff to review status of well applications from the potentially affected area. - SEO will provide the Army and Tri-County Health Department (TCHD) copies of all well applications for the area. - When warranted, RMA will request TCHD to make individual contact with well applicants to provide detailed explanation of groundwater contamination in the area. 	Letter initiating these actions was sent on 8/28/01.	TCHD and RMA staff visit the SEO as they determine the need. Well Permit issuance in the subject affected area is declining rapidly, likely due to the proliferation of municipal drinking water supply systems being installed with new housing developments. 2005 fiscal year permits still not issued with notices. TCHD to audit and assist in future.. RMA's commitment in its 8/28/01 letter was to provide the SEO with new Containment System Reduction Goal (CSRG) Exceedance Maps after each round of sampling is completed every 2 or 3 years. The last 2004 CSRG Exceedance Map was provided to the SEO in November 2005 and the next 2006 CSRG Map will be provided by June 2007 when available.	RMA

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	1) Quantitation Limits: To ensure a more effective implementation of the remedy, the new procedure identified in the five-year report to ensure new quantitation limits for Containment System Remediation Goals are implemented in a timely and consistent manner should be immediately implemented.	Implemented with EPA's approval of the 5-Year Review.	Completed.	RMA
	2) Endrin Applicable or Relevant and Appropriate Requirement (ARAR): The endrin ARAR should be changed from .2 ug/L to 2.0 ug/L to reflect the identical change in State standards for endrin.	ESD describing the change in the Endrin standard was completed 11/12/01.	Completed.	RMA
	3) CERCLA Compliance Document (CCD) for the Hazardous Waste Landfill Wastewater Treatment System: During the next annual review of the CCD, the revised Federal Water Quality Criteria detailed in the five year report should be incorporated as appropriate.	This has been incorporated in the overall RMA schedule. New amendment to incorporate 5-Year Review and leachate from Basin F waste-pile project completed in March 2006.	Completed.	RMA

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	4) Changes in Polychlorinated Biphenyl Decontamination Standards: The updated provisions of the Code of Federal Regulations, Title 40, Section 761.79 should be adopted within three months of the issuance of the report.	Letter indicating that the provisions were adopted was sent on 4/30/01	No further action required.	RMA
	5) Private Well Network: The off-post confined flow system wells monitored as part of the Private Well Network Project should be reduced based on evidence presented in the report.	A Fact Sheet documented this non-significant change was issued in 2002. The 2002 Private Well Network monitoring was reduced as reported in the TCHD "Off-Post Well Sampling and Surface Water Results" dated 10/31/02	The 2002 Private Well Network monitoring was reduced as reported in the TCHD "Off-Post Well Sampling and Surface Water Results" dated 10/31/02. No further action required.	RMA